

H.R. 5161, AS AMENDED BY THE SUBCOMMITTEE
ON TECHNOLOGY AND INNOVATION
ON FEBRUARY 7, 2008

1 SECTION 1. SHORT TITLE.

2 This Act may be cited as the “Green Transportation
3 Infrastructure Research and Technology Transfer Act”.

4 SEC. 2. FINDINGS.

5 Congress finds the following:

6 (1) Transportation infrastructure contributes to
7 the pollution of surface and ground water because it
8 is comprised of impervious surfaces that concentrate
9 contaminants which are introduced into the water
10 supply during storms.

11 (2) Scientists and engineers have developed nu-
12 merous technologies that can be incorporated into
13 transportation infrastructure which control
14 stormwater and mitigate nonpoint source water pol-
15 lution.

16 (3) There has not been widespread implementa-
17 tion of green transportation infrastructure by gov-
18 ernments or private industry because of technical,
19 regulatory, and social barriers, such as lack of train-
20 ing and awareness for builders.

1 (4) The Federal Highway Administration, in
2 partnership with the Environmental Protection
3 Agency, has the technical expertise and capacity to
4 promote the use of green transportation infrastruc-
5 ture technologies by State and local governments
6 and private industry through education and outreach
7 and technical assistance programs.

8 **SEC. 3. REGIONAL GREEN TRANSPORTATION RESEARCH**
9 **CENTERS.**

10 (a) ESTABLISHMENT.—Subchapter I of chapter 55 of
11 title 49, United States Code, is amended by inserting after
12 section 5505 following new section:

13 **“SEC. 5505A. REGIONAL GREEN TRANSPORTATION RE-**
14 **SEARCH CENTERS.**

15 “(a) GREEN TRANSPORTATION INFRASTRUCTURE
16 RESEARCH AND TECHNOLOGY TRANSFER.—The Sec-
17 retary of Transportation shall make grants to university
18 transportation centers established pursuant to section
19 5505 or 5506 to carry out research and development and
20 technology transfer activities in the field of green trans-
21 portation infrastructure.

22 “(b) OBJECTIVES.—Grant funds provided under this
23 section may be used to—

24 “(1) generate innovative and cost-effective ap-
25 proaches to mitigating environmental impacts

1 throughout the lifecycle of transportation infrastruc-
2 ture;

3 “(2) develop holistic approaches to integrating
4 green infrastructure into existing wastewater man-
5 agement systems;

6 “(3) promote adoption of innovative green
7 transportation infrastructure systems by State and
8 local governments and the private sector; and

9 “(4) manage technology transfer programs to
10 disseminate information on best management prac-
11 tices in the area of green transportation infrastruc-
12 ture to State and local governments and the private
13 sector.

14 “(c) SELECTION OF GRANT RECIPIENTS.—

15 “(1) APPLICATIONS.—In order to be eligible to
16 receive a grant under this section, a university
17 transportation center shall submit to the Secretary
18 an application that is in such form and contains
19 such information as the Secretary may require.

20 “(2) MERIT REVIEW; PRIORITY.—Grants shall
21 be awarded under this section on a merit-reviewed
22 competitive basis.

23 “(3) REGIONAL CENTERS.—To the greatest ex-
24 tent practicable, the Secretary shall ensure that
25 there is at least one grant recipient from each of the

1 10 United States Government regions that comprise
2 the Standard Federal Regional Boundary System.

3 “(4) SELECTION CRITERIA.—Except as other-
4 wise provided by this section, the Secretary shall se-
5 lect each recipient of a grant under this section
6 through a merit-reviewed competitive process on the
7 basis of the following:

8 “(A) Demonstrated expertise in transpor-
9 tation research and environmental impacts of
10 transportation infrastructure.

11 “(B) Demonstrated research capacity and
12 technology transfer resources.

13 “(C) Existing or proposed partnerships
14 with State and local governments and private
15 industry involved in transportation-related con-
16 struction, environmental impact mitigation, or
17 other areas related to green transportation in-
18 frastructure research.

19 “(D) Capability to provide leadership in
20 developing national best management practices,
21 regional best management practices, or both in
22 the field of green transportation infrastructure.

23 “(E) Expertise in specific regional climate
24 characteristics which impact the effectiveness of

1 green transportation infrastructure technologies
2 and practices.

3 “(F) Demonstrated ability to disseminate
4 results of research and education programs
5 through a statewide or regionwide continuing
6 education program.

7 “(G) The strategic plan the recipient pro-
8 poses to carry out under the grant.

9 “(d) ACTIVITIES.—The types of activities the Sec-
10 retary may support under this section include the fol-
11 lowing:

12 “(1) Research and development of innovative
13 technologies, construction techniques, or best man-
14 agement processes that mitigate the environmental
15 impact of transportation infrastructure, including—

16 “(A) assessments of the lifecycle environ-
17 mental impact of local existing or planned
18 transportation infrastructure;

19 “(B) integration of green transportation
20 infrastructure elements into existing transpor-
21 tation or waste management systems; and

22 “(C) research, development, testing, and
23 evaluation of new technologies or best manage-
24 ment practices.

1 “(2) Establishment and operation of a regional
2 technology transfer program to disseminate informa-
3 tion on new technologies and best management prac-
4 tices to State and local governments, institutions of
5 higher learning, and private industry in the region.

6 “(3) Study of the impact of State, local, and
7 Federal regulations on the implementation of green
8 transportation infrastructure technologies and prac-
9 tices. These studies shall include collaboration with
10 appropriate Federal agencies to evaluate the effect
11 of and possible changes to Federal and State regula-
12 tions that impede implementation of green transpor-
13 tation infrastructure.

14 “(4) Public education campaigns to raise
15 awareness of the benefits of green transportation in-
16 frastructure technologies, including activities to raise
17 awareness and foster collaboration among regional
18 governments, private industry, and other public and
19 private stakeholders.

20 “(e) ANNUAL MEETING.—The Secretary shall con-
21 vene an annual meeting of the Centers receiving grants
22 pursuant to this section in order to foster collaboration
23 and communication among Center participants and dis-
24 seminate best management practices.

1 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Secretary to carry
3 out this section \$6,000,000 for each of the fiscal years
4 2009 and 2010. Amounts appropriated pursuant to this
5 section shall be in addition to amounts otherwise appro-
6 priated for university transportation centers established
7 pursuant to section 5505 or 5506.

8 “(g) DEFINITION.—In this section, the term ‘green
9 transportation infrastructure’ includes infrastructure
10 that—

11 “(1) preserves and restores natural processes,
12 landforms (such as floodplains), natural vegetated
13 stream side buffers, wetlands, or other topographical
14 features that can slow, filter, and naturally store
15 stormwater runoff and floodwaters for future water
16 supply and recharge of natural aquifers;

17 “(2) utilizes natural design techniques that in-
18 filtrate, filter, store, evaporate, and detain water
19 close to its source;

20 “(3) minimizes the use of impervious surfaces
21 in order to slow or infiltrate precipitation;

22 “(4) minimizes lifecycle energy consumption, in-
23 cluding during construction, maintenance, use by ve-
24 hicles, and destruction and recycling; and

25 “(5) minimizes lifecycle air pollution.”.

1 (b) CONFORMING AMENDMENT.—The table of sec-
2 tions for such subchapter is amended by inserting after
3 the item relating to section 5505 the following new item:

“5505A. Regional Green Transportation Research Centers.”.

4 **SEC. 4. GREEN TRANSPORTATION INFRASTRUCTURE**
5 **AMENDMENTS.**

6 Section 504 of title 23, United States Code, is
7 amended—

8 (1) in subsection (a)(3)—

9 (A) in subparagraph (A)(ii)—

10 (i) by striking “and” at the end of
11 subclause (V);

12 (ii) by striking the period at the end
13 of subclause (VI); and

14 (iii) by adding at the end the fol-
15 lowing new subclause:

16 “(VII) the use of green transpor-
17 tation infrastructure (as defined in
18 section 5505A(g) of title 49) for envi-
19 ronmental protection and mitigating
20 environmental impacts of transpor-
21 tation construction.”; and

22 (B) by adding at the end the following new
23 subparagraph:

24 “(D) INTERAGENCY COORDINATION.—The
25 Institute shall coordinate the development of

1 curriculum and courses with other Federal
2 agencies with expertise in the course subject
3 areas.”; and

4 (2) in subsection (b)(2)(A)(i) by striking “and
5 traffic safety countermeasures” and inserting “traf-
6 fic safety countermeasures, and options with respect
7 to green transportation infrastructure (as defined in
8 section 5505A(g) of title 49)”.